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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,313	10/13/2003	Zachary J. Mason	SPARC.096A	3315

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EXAMINER

GORTAYO, DANGELINO N

ART UNIT	PAPER NUMBER
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2168

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/684,313

Applicant(s)

MASON, ZACHARY J.

Examiner

Dangelino N. Gortayo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/31/03 2/17/04  
11/18/04 2/11/05

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-16 are pending.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Ortega et al. ("Ortega" US Patent 6,606,619 B2).

As per claim 1, Ortega teaches "A computer-implemented method of analyzing browse activity data of users of a database access system,"(see Abstract) "the method comprising: providing a browse tree in which items represented within a database are arranged within item categories over multiple levels of item categories;" (Figure 1B and column 4 lines 52-61, wherein a browse tree of books is provided) "assigning individual user history scores to specific categories of the browse tree based at least in-part on an item selection history of a user, wherein the individual user history scores represent the user's predicted affinities for the corresponding item categories;" (column 10 lines 32-45, wherein individual user history scores are compiled) "assigning collective user

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history scores to specific categories of the browse tree based at least in-part on item selection histories of a population of users, wherein the collective user history scores represent the predicted affinities of the user population for the corresponding item categories;" (column 10 line 46 – column 11 line 2, wherein scores are based on the collective actions of the community) "and evaluating differences between the individual user history scores and the collective user history scores to generate a relative preference profile for the user, wherein the relative preference profile comprises relative preference scores for specific item categories, said relative preference scores reflecting a degree to which the user's predicted affinity for a category differs from the predicted affinity of the user population for that category."(column 15 line 55 – column 16 line 4, wherein the individual scores and the collective user scores are used to generate scores for the user and is equivalent)

As per claim 2, Ortega teaches "assigning individual user history scores to specific categories comprises: (a)determining an amount of credit to be distributed for an item selection event in which the user selected an item; and (b) distributing said amount of credit among the item categories under which the item falls, including item categories at multiple levels of the browse tree." (Tables 5-6 and column 13 lines 21-42, wherein the item selection events are weighted and distributed at multiple levels of the browse tree)

As per claim 3, Ortega teaches "repeating (a) and (b) for each of a plurality of selection events while summing credit values assigned to like item categories."(column 14 lines 4-29, wherein credit values are repeated for each category and action)

As per claim 4, Ortega teaches “evaluating differences between the individual user history scores and the collective user history scores comprises calculating at least one of a relative entropy function, a dot product function, or a sum of squares function of the individual user history scores relative to the collective user history scores” (column 15 line 55 – column 16 line 4, wherein the distribution between the user and collective scores are found, equivalent to a relative entropy function)

As per claim 5, Ortega teaches “providing personalized item recommendations to the user based at least in-part on the relative preference profile.” (column 7 lines 44-48, wherein items are recommended based on the scores)

As per claim 6, Ortega teaches “providing personalized category recommendations to the user based at least in-part on the relative preference profile.” (column 7 lines 48-51, wherein leaf categories are presented based on scores)

As per claim 7, Ortega teaches “the item selection history of the user comprises a history of items selected for downloading.” (column 12 lines 20-28, wherein the item history comprises purchase history)

As per claim 8, Ortega teaches “the item selection history is based solely on the user's selections of items during browsing of the browse tree.” (column 12 lines 20-28, wherein item selection history comprises web activity data)

As per claim 9, Ortega teaches “incrementally updating the relative preference profile of the user in response to new item selection events of the user.” (column 15 lines 43-54, wherein the user score is initiated when a user performs actions)

As per claim 10, Ortega teaches “the relative preference profile is updated substantially in real-time as the user interacts with the browse tree.” (column 15 lines 43-54, wherein the user score is incremented as the user navigates the browse tree)

As per claim 11, Ortega teaches “A method of distributing credit for a selection event among the nodes of a browse tree,” (see Abstract) “the method comprising: determining a total amount of credit to be distributed for the selection event in which a user selected an item within the browse tree;” (Table 5 and column 13 lines 21-42, wherein the amount of credit for a click-through of an item is determined) “identifying each ancestor node of the selected item within the browse tree,” (column 7 lines 52-67, wherein each item comes from a leaf category) “dividing said total amount of credit by the number of ancestor nodes of the selected item to determine an amount of credit per ancestor to be distributed for the selection event;” (Table 8 and column 15 lines 27-34, wherein the total amount of credit is distributed to leaf categories) “and assigning said amount of credit per ancestor to the ancestor nodes of the selected item within the browse tree.” (column 14 line 39 – column 15 line 11, wherein credit is assigned to each leaf category)

As per claim 12, Ortega teaches “said total amount of credit is the same for all selection events.” (column 16 lines 34-48, wherein the total amount of credit stays constant)

As per claim 13, Ortega teaches "said total amount of credit varies based on the nature of the selection event." (Table 5 and column 13 lines 21-42, wherein the amount of credit varies based on the user activity)

As per claim 14, Ortega teaches "the selection event comprises viewing an item and said total amount of credit varies based on the amount of time spent viewing the item." (column 14 lines 30-38, wherein the credit is based on an algorithm with a period of time attached to it, and is equivalent)

As per claim 15, Ortega teaches "a server system coupled to a communications network, said server system providing access to a browse tree in which items represented within a database are arranged within a hierarchy of item categories over multiple levels of item categories, said server system configured to maintain item selection histories for each user within a population of users;" (Figure 2 reference 220 and column 9 lines 46-57, "server components") "an analysis module which analyzes at least the item selection histories to predict user affinities for specific item categories of the browse tree, wherein the analysis module additionally generates a relative preference profile for a given user by calculating differences between the user's predicted affinities for specific item categories of the browse tree and the population's predicted affinities for said item categories;" (Figure 2 reference 280 and column 10 lines 21-31, "browse tree component) "and a recommendation module coupled to the server system and configured to access the relative preference profile of the user to make personalized recommendations to the user based at least in-part on the relative

preference profile.” (Figure 2 reference 290, 292 and column 10 lines 32-45, “category popularity table” and “popular items table”)

As per claim 16, Ortega teaches “the analysis module calculates the user's predicted affinities for the specific item categories based at least in-part by distributing an amount of credit associated with an item selection event among a plurality of item categories under which the selected item falls within the browse tree.” (column Figure 2 reference 280 and column 11 line 46 – column 12 line 13, wherein the browse tree component distributes credit based on user actions to form predicted user interests)

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bieganski et al. (US Patent 6,334,127 B1)

Hosken (US Patent 6,438,579 B1)

Fohn et al. (US Patent 6,460,025 B1)

Ortega et al. (US Patent 6,489,968 B1)

Welsh et al. (US Patent 6,757,691 B1)

Linden et al. (US Patent 6,912,505 B2)

Ford et al. (US Patent 6,963,897 B2)

Crosby et al. (US Patent 7,003,503 B2)

Taylor (US Patent 7,013,300 B1)



Linden et al. (US Patent 6,266,649 B1)

Smith et al. (US Patent 6,853,982 B2)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dangelino N. Gortayo whose telephone number is (571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dangelino N. Gortayo  
Examiner



Tim T. Vo  
SPE